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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/546,130	08/16/2005	Katsuo Sugahara	09852/0203290-USO	9914
7278	7590	01/18/2008		
DARBY & DARBY P.C. P.O. BOX 770 Church Street Station New York, NY 10008-0770			EXAMINER MCGUTHRY BANKS, TIMA MICHELE	
			ART UNIT 1793	PAPER NUMBER
			MAIL DATE 01/18/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/546,130

Applicant(s)

SUGAHARA, KATSUO

Examiner

Tima M. McGuthry-Banks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12 and 37-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12 and 37-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Status of Claims***

Claims 1-11 and 13-36 are cancelled, Claim 12 is currently amended, Claims 37-42 are as previously presented, and Claims 43-45 are new.

***Drawings***

The drawings were received on 5 November 2007. These drawings are acceptable.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 12, 37, 39, 40 and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 97/43457 (WO '457).

WO '475 discloses a hanger made from a nickel base alloy with composition overlapping the claimed ranges as follows:

Element	WO '457			
	12	Composition	Citation	Overlap
Cr	43-50	38-75	Claim 1	43-50
Mo	0.1 - 2	< 0.9	Claim 10	0.1 - 0.9
Mg	0.001 - 0.05	0 - 1.0	Claim 1	0.001 - 0.05
N	0.001 - 0.04	< 0.04	Claim 5	0.001 - 0.04
Mn	0.05 - 0.5	0 - 1.0	Claim 1	0.05 - 0.5
C	< 0.05	< 0.02	Claim 2	< 0.02
Fe	0.05 - 1.0	0 - 5.0	Claim 1	0 (claim 11) 0.05 - 1.0 (claim 12)

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Element	WO '457			
	12	Composition	Citation	Overlap
Si	0.01 – 0.1	0- 1.5	Claim 1	0 (claim 11) 0.01 – 0.1 (claim 12)
Ni	balance	balance	Claim 1	balance

With respect to Claim 12, the compositions disclosed by WO '457 overlap the claimed ranges as tabulated above; therefore a *prima facie* case of obviousness exists (M.P.E.P. § 2144.05). For example, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include between 43 and 50 % Cr in the alloy of WO '457, since WO '457 discloses equal utility over the boarder range of 38 to 75%. Regarding Claim 45, a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. See MPEP § 2144.05 I.

Regarding the limitation of a wrought nickel alloy in Claims 12 and 43, applicant intends for the process steps defined by “wrought” to be incorporated in the claim. Even though product-by-process claims are limited and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or as obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. See MPEP § 2113.

With respect to Claims 37, 39 and 40, although WO '457 does not teach the use of the alloy in a polymer electrolyte fuel cell, such is the applicants' future or intended use. Statements of purpose or intended use in the preamble are evaluated to determine whether the recited

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purpose or intended use results in a structural difference. If a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim (M.P.E.P. 2111.02). The hanger disclosed in WO '457 is used for supporting pipes and other elements to be mounted in the chamber (p. 2) and is therefore a structural member and a pipe member. WO '457 discloses that preferably all of the components of the hanger are entirely made from the corrosion resistant material (p. 10 lines 19-28) and further discloses the use of screws, bolts or pins (p. 11) to insert through the flange and secure to the wall of the combustion chamber. It would have been obvious to one of ordinary skill in the art at the time the invention was made to fabricate the screws, bolts or pins (i.e. fasteners) from the alloy of WO '457 since WO '457 teaches that all components are advantageously fabricated from this material for corrosion resistance.

Regarding Claim 44, a hangar reads on a structural member.

Claims 12 and 38-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 303 957 (EP '957) in view of WO 97/43457 (WO '457).

With respect to claim 12, EP '957 discloses a corrosion resisting Ni-base alloy with generally 38-50% Cr and 0.1 to 2 wt% of at least one of Mo and W where the alloy can be used in applications including pipes (abstract). Example alloys 3, 6, 7, 10-12, 14, 15, 17, 18, 21, 22-25, 28, 29, 31, 33, 36, 38-40, 42, 44, 45, 47, 48, 50, 53, 55-57, 59, 63 and 65 meet the instant claimed limitations for between 43 and 50% Cr, 0.01 to 2.0% Mo,  $\leq 0.05$  wt% C and between 0.001 and 0.04% N (Table 1-1, p. 7). EP '957 discloses allowable impurity levels of 0.05 wt% or less Mg, and 0.3 wt% or less Mn (p. 3 lines 9-11). The ranges of Mo, Mg and Mn overlap the instant claimed ranges; therefore a prima facie case of obviousness exists (see M.P.E.P. § 2144.05).

With respect to claims 39-41 and 44, although EP '957 does not teach the use of the alloy in a polymer electrolyte fuel cell, such is the applicants' future or intended use. Statements of purpose or intended use in the preamble are evaluated to determine whether the recited purpose or intended use results in a structural difference. If a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim (M.P.E.P. 2111.02). EP '957 discloses rolled plate (p. 3 lines 43-55) which meets the structural limitations of claims 39 and 44 and pipe (abstract) which meets the structural limitations of claims 39 and 44, since both the manifold and separator members are structurally the same as pipe and/or plate.

Further, EP '957 discloses that 0.3 wt% or less Fe may be included as impurity (p. 3 lines 9-11) which overlaps the claimed range of between 0.05 to 1.0 wt%, therefore a prima facie case of obviousness exists (M.P.E.P. § 2144.05).

Regarding the limitation of a wrought nickel alloy in Claims 12 and 43, applicant intends for the process steps defined by "wrought" to be incorporated in the claim. Even though product-by-process claims are limited and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or as obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. See MPEP § 2113.

EP '957 does not disclose the inclusion of between 0.01 to 0.1 wt% Si.

WO '457 discloses a substantially similar alloy as discussed above regarding the rejection of claims 11-13, 15, 16, 37, 39 and 40 as unpatentable over WO '457. WO '457 discloses that up to 0.95 wt% Si can be beneficially added to improve corrosion resistance (paragraph bridging pp. 5-6). It would have been obvious to one of ordinary skill in the art at the time the invention

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was made to add up to 0.95 wt% Si as taught by WO '457 to the alloy of EP '957 to improve corrosion resistance as taught by WO '457 and as desired in EP '957. Regarding Claim 45, a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. See MPEP § 2144.05 I.

With respect to claims 37-39, 41 and 42, although EP '957 does not teach the use of the alloy in a polymer electrolyte fuel cell, such is the applicants' future or intended use. Statements of purpose or intended use in the preamble are evaluated to determine whether the recited purpose or intended use results in a structural difference. If a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim (M.P.E.P. 2111.02). EP '957 discloses rolled plate (p. 3 lines 43-55) which meets the structural limitations of claims 13, 17 and 18 and pipe (abstract) which meets the structural limitations of claims 13, 14 and 18, since both the manifold and separator members are structurally the same as pipe and/or plate.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 12 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of copending Application No. 10/501100.

Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Application '001 claim 2 discloses that the alloy further contains 0.05 to 1.0 wt% Fe and 0.01 to 0.1 wt% Si, which is the same composition as in instant claim 12.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

Applicant's arguments filed 5 November 2007 have been fully considered but they are not persuasive. The substance of applicant's arguments is that the nickel alloy of the present invention is wrought, as opposed to being sintered as taught by the prior art of record. However, as stated above in the rejections, even though product-by-process claims are limited and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or as obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. See MPEP § 2113.



***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tima M. McGuthry-Banks whose telephone number is (571) 272-2744. The examiner can normally be reached on M-F 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TMM   
9 January 2008

  
**ROY KING**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 1700**